

Title (en)
Semiconductor device and method for fabricating the same

Title (de)
Halbleitervorrichtung und Herstellungsverfahren

Title (fr)
Dispositif à semiconducteur et son procédé de fabrication

Publication
EP 1355363 A2 20031022 (EN)

Application
EP 03009043 A 20030417

Priority
JP 2002115859 A 20020418

Abstract (en)
A constant voltage device includes n-type and p-type doped layers. The n-type doped layer is formed by heavily doping with an n-type impurity an upper portion of a p-type silicon semiconductor substrate, in an active region defined by an isolating insulator film. The p-type doped layer is formed by doping the region under the n-type doped layer with a p-type impurity. The n-type and p-type doped layers are provided to form two layers in parallel with the substrate surface of the semiconductor substrate, whereby a pn junction formed between the n-type and p-type doped layers creates a diode structure. Impurity concentration in the p-type doped layer is established so that the impurity concentration of a portion adjacent the isolating insulator film is lower than that of the rest.

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H01L 29/866; **H01L 29/861**; **H01L 21/329**

IPC 8 full level
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CPC (source: EP US)
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Cited by
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DOCDB simple family (publication)
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